REMARKS

Applicants thank Examiner Shosho for acknowledging that the data of the original specification would be successful in establishing unexpected or surprising results over EP 1113051 (see the paragraph bridging pages 10 and 11 of the September 8, 2006 Office Action) if the data were commensurate in scope with the claims. During the discussion with Applicants' U.S. representative on September 18, 2006, the Examiner acknowledged that an amendment to independent Claim 1 to require that component (D) be present in an amount of 10-87% by weight would overcome the rejection in view of EP 1113051, pending the Examiner's confirmation that support for such an amendment was present in the original specification.

Applicants submit the amendment to Claim 1 overcomes the rejection in view of EP 1113051 and respectfully request withdrawal of the rejection.

On page 11, lines 12-19 of the September 8, 2006 Office Action it is stated:

> "Nakano et al. always requires that the polymer is obtained from 5 monomers ...".

Applicants submit that this is not correct. The composition of the Nakano vinyl polymer is described at column 8, lines 6-18. There is no requirement that five monomers are always present. In fact, it is stated that the presence of monomers (D) and (E) is only a preferable embodiment of the invention. Applicants thus submit that the Office's characterization of the vinyl polymer of Nakano is incorrect.

Independent Claim 1 is amended herein to require the presence of both a polyethylene oxide-containing monomer and a polypropylene oxide-containing monomer. Applicants submit that the data previously discussed in the present application (see page 10, line 15 through page 12, line 7 of the Amendment filed on June 12, 2006 and the Rule 132 Declaration submitted concurrently therewith) is sufficient to demonstrate the superiority of a composition containing a vinyl polymer that includes polymerized units of both a

polyethylene oxide-containing monomer and a polypropylene oxide-containing monomer in comparison to compositions that contain a vinyl polymer containing only one of either a polyethylene oxide- or polypropylene oxide-containing monomer unit.

In the Amendment filed on June 12, 2006, Applicants demonstrated the importance of having a styrenic macromer present in the claimed composition in comparison to compositions that do not contain a styrenic macromer. Applicants submit that the data demonstrate the significance of having two different types of alkylene oxide-containing monomer units present in the vinyl polymer. The compositions of the inventive and comparative examples provided in the original specification are reproduced below for convenience:

Table 1

Prep. Ex. No.	1	2	3
Monomer Composition (parts by weight)			
Polyethylene Glycol Monomethacrylate	25	25	**10**
Polypropylene Glycol Monomethacrylate	0	0	**15**
Methacrylic Acid	12	12	**12**
Styrene Monomer	63	53	**53**
Styrenic Macromer	0	10	**10**
Weight-Average Molecular Weight of Polymer	50000	57000	**55000**

The Declaration submitted on June 12, 2006 provided the angular dependency of color tone for the compositions described in Table 1 above. The angular dependency of color tone (a-value) measured at a light intercepting angle of 45° for each of Examples 1-3 of Table 1 follows below:

Example 1 = 39

Example 2 = 35

Example 3 = 30.

See the Declaration filed on June 12, 2006, paragraph no. 5 on page 2.

Example 3 has the lowest angular dependency of color tone (e.g., a-value) of the three compositions described in Table 1. Unlike Examples 1 and 2, Example 3 requires that both a polyethylene oxide-containing monomer unit and a polypropylene oxide-containing monomer unit are present in the vinyl polymer. Examples 2 and 3 provide a direct comparison between two compositions that are identical except for the fact that Example 2 includes only a single alkylene oxide-containing monomer unit (i.e., polyethylene glycol monomethacrylate) whereas inventive Example 3 includes both polyethylene oxide- and polypropylene oxide-containing monomer units (i.e., polyethylene glycol monomethacrylate and polypropylene glycol monomethacrylate). In all other respects the compositions of Examples 2 and 3 are made from the same materials.

Thus, Examples 2 and 3 provide a side-by-side comparison that shows the effect of having two different alkylene oxide-containing monomer units present in the vinyl polymer. With respect to the value of the angular dependency of color tone of Example 3, the Declarant of the Declaration submitted on June 12, 2006 stated the following:

> The angular dependency of color tone observed for Example 3 is significantly different than the angular dependency of color tone known for other cyan pigments. The angular dependency of color tone is substantially lower for Example 3 in comparison to Examples 1 and 2.
>
> It is my opinion that the angular dependency of color tone of 30 (a-value) measured for Example 3 is significantly different than the angular dependency of color tone measured for Examples 1 and 2 which have values of 39 and 35, respectively.

Applicants thus submit that the data of the original specification and the data of the Declaration submitted on June 12, 2006 demonstrate that a composition containing a vinyl polymer including both a polyethylene oxide-containing and a polypropylene oxide-

containing monomer units is significantly superior than compositions containing a vinyl polymer having only one of the aforementioned monomer units and thus, the subject matter of Claim 1 is not obvious in view of Nakano

Applicants point out that Nakano does not disclose or suggest that significantly improved and/or different performance may result by using two different types of alkylene oxide monomer units. In fact, Nakano makes no distinction between alkylene oxide monomer units and discloses only a single example containing any alkylene oxide monomer unit, i.e., methoxypolyethylene glycol (n=4) methacrylate (see Preparation Example 1 in column 12 of Nakano). While Nakano discloses a large family of alkylene oxide group-containing monomer units represented by a formula (I) (see column 4, lines 45-column 5, line 54), Nakano nowhere discloses or suggests that a particular combination of alkylene oxide-containing monomer units such as the combination presently claimed (i.e., the inclusion of both a polyethylene oxide- and polypropylene oxide-containing monomer unit) can provide substantially different properties when used to make a vinyl polymer for use in an ink composition.

Applicants thus submit that the date of the original specification provides a showing of superior results that is commensurate in scope with the prior art. For example, the data of the original specification show that a particular result may be obtained when a combination of certain monomer units is used. Nakano, on the other discloses, at best, only a single composition containing only a single alkylene oxide-containing monomer unit. Applicants submit that it does not matter that Nakano exemplifies a composition containing additional monomer units because those additional monomer units in no way disclose or suggest the combination of alkylene oxide-containing monomer units required to be present in the pending claims.

For the reasons discussed above, Applicants submit that all now-pending claims are in condition for allowance and respectfully request withdrawal of the rejections.

With respect to the Terminal Disclaimer, Applicants submit herewith a Terminal Disclaimer in view of co-pending application 10/329,349. Applicants submit that the Terminal Disclaimer obviates the obviousness-type double patenting rejection. Applicants note that a certified English translation of the priority document was submitted on October 31, 2005. Applications thus perfected their claim to priority (i.e., August 7, 2002). Moreover, Applicants note that the subject matter of the present invention and the 10/329,349 application were commonly owned or subject to an obligation of assignment to Kao Corporation, at the time the presently claimed invention was made.

Respectfully submitted,

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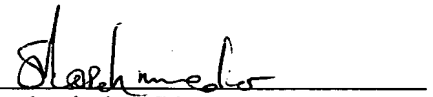

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